

ARTICLE COMMENTARY



How to make effective HPV vaccine recommendations starting at age 9

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ABSTRACT

This article provides best and promising practices for recommending HPV vaccination at age 9 as a way to ensure high uptake. An effective method for recommending HPV vaccination is the Announcement Approach, which consists of 3 evidence-based steps. The first step, *Announce*, involves noting that the child is 9 years old, saying they are due for a vaccine that prevents 6 HPV cancers, and saying you'll vaccinate today. This adapted version of the Announce step simplifies the bundled approach used at ages 11–12 that emphasizes the prevention of meningitis and whooping cough in addition to HPV cancers. For hesitant parents, the second step, *Connect and Counsel*, involves finding common ground with the parent and communicating the value of starting HPV vaccination at the first opportunity. Finally, for parents who decline, the third step is to *Try Again* at a later visit. Using the Announcement Approach at age 9 stands to increase HPV vaccine uptake, save time, and lead to high family and provider satisfaction.

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A growing body of evidence supports beginning HPV vaccination at age 9 instead of waiting until the traditionally targeted ages of 11–12 years.¹ The American Academy of Pediatrics recommends HPV vaccination as early as age 9,^{2,3} and the CDC has always allowed children to begin the series at this age.⁴ Starting at age 9 may lead to more timely completion of the vaccine series, according to several observational studies, including two in this issue of the journal.^{5–10} Starting HPV vaccination at age 9, or proactive vaccination,¹¹ can better protect children from HPV infections that can lead to six cancers. Furthermore, most providers report that they are open to recommending HPV vaccination at age 9, although they may need communication training and other support to do so effectively.¹² This article summarizes best and promising practices for recommending HPV vaccination at age 9.

The Announcement Approach, an evidence-based intervention initially developed for training providers to recommend HPV vaccination at ages 11–12, provides a strong foundation for building providers' capacity to recommend at age 9.^{13,14} A cluster randomized trial of 29 primary care clinics found that this one-hour, in-clinic training for providers and other clinical staff increased HPV vaccine coverage by 5.4% points among adolescents ages 11–12. In this trial, HPV vaccine initiation for both boys and girls increased.¹³ A train-the-trainer model, in which HPV vaccine providers in a large healthcare system learned to facilitate Announcement Approach trainings for their colleagues, was also effective at increasing HPV vaccine

uptake.¹⁵ The Announcement Approach saves time,¹⁴ and presumptive HPV vaccine communication leads to higher satisfaction among parents and providers.¹⁶



The three steps of the original Announcement Approach for ages 11–12 are summarized in Table 1. In addition, we offer an adapted version of the approach to support recommendation at ages 9–10. We also provide the rationale for the steps along with supporting evidence below.

Step 1. Announce

The best way to begin a recommendation is to Announce that, based on the child's age, they are due for HPV vaccination, using language that assumes the family will be vaccinating. This is the first step of the Announcement Approach. The idea is to use the same brief and warm language you use for many other vaccines and preventive services for children this age. If you make the vaccine routine, many families will follow your lead.

Announcements are brief, taking perhaps 15 seconds. They are helpful to parents who are ready to vaccinate and don't need or want a long discussion. The time saved can be spent on managing chronic health problems, screening, anticipatory guidance, or other tasks and activities often required in pediatric primary care. Many parents agree to vaccination after hearing an announcement.

The Announce step makes use of several communication principles to maximize its impact. The most important of these is to *set the norm* to make HPV vaccine like the many other vaccines children receive routinely.¹⁷ The Announce step is

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Table 1. The Announcement Approach to recommending HPV vaccine for children and adolescents.

Principle	Action	Example
Step 1. Announce		
Set the norm	Note the child's age	Age 9-10: "Alex is now 9, so today they'll get a vaccine that prevents six HPV cancers." Age 11-12: "Now that Jasmine is 11, she is due for three vaccines. Today, she'll get vaccines against meningitis, HPV cancers, and whooping cough."
Focus on diseases not vaccines	Age 9-10: Say children this age are due for vaccines that prevent six HPV cancers Age 11-12: Say children this age are due for vaccines that prevent meningitis, HPV cancers, and whooping cough	
Use presumptive language	Say you will vaccinate today	
Show urgency		
Step 2. Connect and Counsel		
Identify the single biggest concern	Ask for their main concern	"You mentioned you didn't know enough about the vaccine. What would you say is your main concern?" [Listening] "The American Academy of Pediatrics recommends that kids get the HPV vaccine starting at age 9 to prevent six cancers. I strongly recommend Alex get it today because the vaccine works better when given younger."
Show you are listening	Restate the concern	
Address the concern	Use a research-tested message	
Show urgency	Provide a clear recommendation using the words "recommend" and "today"	
Step 3. Try Again		
Set the stage	Say you will talk about the vaccine at the next visit	"I've made a note in Alex's chart to revisit HPV vaccine at their next checkup. I want Alex to have every opportunity for cancer prevention, so let's keep talking about it."
Rely on systems	Make a note in the chart for the next visit	

also designed to *focus on diseases and not vaccines* because parents are interested in the benefit to the child, especially for cancer prevention. The step *uses presumptive language*, which parents will recognize from many other clinical interactions. Finally, announcements *show urgency* so that the parent clearly hears that the provider would like to vaccinate today, because some parents may incorrectly think that the discussion is about preparing for HPV vaccination at a later appointment instead of vaccinating today.

The principles underlying the Announce step are derived from a large body of research literature. For example, early work by Opel^{18,19} on using presumptive language for vaccine recommendations identified this communication style as promising. Evidence from later observational studies shows that announcements and other presumptive language lead to higher uptake of HPV vaccine^{20–22} and other adolescent vaccines.^{23–25} Similarly, evidence from randomized trials also supports the benefits of training providers and other clinical staff to use presumptive language.^{13,26–28} The emphasis on cancer prevention is supported by various studies on message framing, demonstrating that this is a potent component of a recommendation.^{29–33} Communicating urgency by recommending same-day vaccination encourages uptake,³³ while offering an option to delay reduces same day uptake by 70% points.²² Early studies showed that as few as 15% of providers used presumptive language in examination of recordings of visits and by provider and patient self-reports,^{18,22} but more recent studies have shown the majority of providers report using presumptive language for HPV vaccination.³⁴

Here are some examples of announcements, also shown in Table 1. For children ages 9 or 10 years, the announcement will focus on preventing six cancers. It might sound like this, "Alex is

now 9, so today they'll get a vaccine that prevents six HPV cancers." For ages 11 or 12, the announcement will bundle the recommendation for the three vaccines routinely given at this age: meningitis, HPV, and Tdap. It might sound like this, "Now that Jasmine is 11, she is due for three vaccines. Today, she'll get vaccines against meningitis, HPV cancers, and whooping cough."

Step 2. Connect and counsel

For parents hesitant about HPV vaccination, the best approach is to Connect and Counsel. This is the second step of the Announcement Approach. While announcements are brief and use similar language across patients, the pace of the visit slows down during this step, and the communication content is tailored to each patient.

Connecting and counseling is often as short as 2 minutes, though providers can spend more time as their schedule allows. If it is heading past 5 minutes, then we recommend moving to Step 3 and continuing discussion at the next visit. The short and structured nature of the interaction can help keep clinic flow on track and ensure the conversation does not go on longer than necessary.

The specifics of the Connect and Counsel step are to first *identify the single biggest concern* by asking for the main concern regardless of what the parent may have already voiced. Next, *show you are listening* by restating the concern in your own words, because parents are more open to hearing your advice once they know you have listened to them. Once you have established a connection with parents, you can *use a research-tested message* that you tailor to their concern (see Table 2). For age 9 recommendations, messages that

Table 2. Evidence-based messages for addressing parent concerns.

Concern	Message
Age	"Kids have a stronger immune response to HPV vaccine when they're younger. That may give them better protection against HPV cancers later on."
Sex	"This really isn't about sex. The HPV vaccine is about preventing cancer."
Safety	"Researchers have conducted over 100 studies on the safety of HPV vaccine. They've consistently found that it's really safe, just like the other vaccines given at this age."
Effectiveness	"Over 36,000 Americans get cancer from HPV every year. Most could be prevented with the HPV vaccine."
Guidelines	"The American Academy of Pediatrics recommends that kids get the HPV vaccine starting at age 9 to prevent six cancers."
Boys	"HPV infections don't care if you're a boy or girl. The virus can cause cancer and many other diseases."
Requirements	"School requirements don't always keep up with medical science. The HPV vaccine is an important vaccine that can prevent many cancers."

Based on Shah et al.³³

emphasize the benefits of starting HPV vaccination at the first opportunity are likely to be especially salient. Finally, *show urgency* by making a clear recommendation for vaccination today. Some parents will still think this is a discussion about an eventual decision rather than about getting vaccinated today, so strongly recommending same-day vaccination is key.

Our research has found that parents become more confident in HPV vaccine and motivated to vaccinate when they receive research-tested messages about HPV vaccination.³³ We have developed messages to address the 7 most common parent concerns (Table 2). Many studies have shown that messages about cancer prevention are especially effective.^{29–33} A surprising finding is that parents want messages that are longer and do not reflect urgency.³³ Thus, it is important to elaborate on the often-brief research-tested messages that our and other research groups have evaluated. It is also important to leave the sense of urgency for the final part of the Connect and Counsel step, where you remind them that you advise vaccinating today. In addition, an experiment with a national sample of parents of adolescents randomized them to view videos with a pediatrician recommending HPV vaccine for their child.³⁵ Seeing the video that addressed the parents' specific concerns led to higher HPV vaccine confidence and motivation to vaccinate. Thus, it is especially important during visits with hesitant parents to invest time into eliciting and addressing parent concerns.

Here is an example of what the Connect and Counsel step might sound like. "You mentioned you didn't know enough about the vaccine. What would you say is your main concern?" Listen carefully to the parent. And then, "You said that you were surprised that Alex would get the vaccine at this age. I get that. It may help to know that the American Academy of Pediatrics recommends that kids get the HPV vaccine starting at age 9 to prevent six cancers. It's a really important opportunity to protect kids well before they are ever exposed. That's why I recommend Alex get it today because the vaccine works better when given at younger ages."

Step 3. Try again

For parents who decline HPV vaccination, the best approach is to Try Again at a later visit. This is the third step of the Announcement Approach. Some families may need to think about what they have heard about HPV vaccination or consult another parent. The visit now picks up speed again as you wrap up this conversation and move on to other topics. Try Again takes perhaps 15 seconds.

The specifics of the Try Again step are to *set the stage* by saying you will talk about the vaccine at the next visit. Next, *rely on systems* by making a note in the chart to prompt a follow-up when you see them again. A good practice is to focus notes on the need to revisit and recommend HPV vaccination, rather than simply noting that the parent has declined. That way, other providers will be assured that the family expects another recommendation rather than assuming that the conversation is closed and should be avoided. Research by Kornides³⁶ and colleagues indicates that agreeing to HPV vaccination after an initial declination, termed "secondary acceptance," is common. Of parents who decline HPV vaccination, most parents (69%) get it at the next visit or plan to get it within the following 12 months.³⁶ This secondary acceptance of HPV vaccine is associated with receipt of follow-up counseling by a provider. However, only half of parents reported receiving a follow-up reminder,³⁶ underscoring the importance of the Try Again step.

Here is an example of what the Try Again step might sound like: "We'll talk more about HPV vaccine at Alex's next checkup. It's important for them to have every opportunity for cancer prevention, so I've added a note to their chart. Let's be sure to revisit this discussion."

Trainings

Our group developed a standardized training on using the Announcement Approach that is now designated as an evidence-based best practice by the National Cancer Institute. The one-hour, in-clinic training is led by a physician or other clinical staff with experience in adolescent vaccination. The free, standardized training materials, which include slides, scripts and a flier, are available through hpvIQ.org. As previously noted, the brief training increases HPV vaccination uptake, and the communication approach increases confidence and satisfaction.^{13,14,16} Over 2,000 primary care professionals from across the US and in other countries have now received training on the Announcement Approach.

To orient facilitators who lead the trainings, we developed a train-the-trainer model.¹⁵ Facilitators attend an Announcement Approach training and an orientation to the curriculum and logistics. Afterwards, they practice presenting the training on their own and with a small group. We have found that the trainings run more smoothly when supported by an administrative staff member. Some of the most successful efforts have been by healthcare systems that host

communication trainings as part of ongoing quality improvement efforts.

Research gaps

As the Announcement Approach's dissemination continues to grow, so should the research to support it. Research questions about the approach overall include whether the Connect and Counsel step should be adjusted for patients ages 9–10. It remains an open question about who should deliver Announcement Approach trainings. Our group has valued physicians' ability to lead and deliver these trainings, but we believe that experienced, advanced practice providers and other well-respected clinical staff could be effective as well. Research is ongoing to determine whether the training is more effective when led by someone from within the healthcare organization or by an outsider. Finally, it may be possible to expand the impact of the training with vaccination standing orders and financial incentives, two topics that are also the focus of ongoing research. Several questions also remain regarding announcements. We often receive questions about who to use announcements with and when to use them. Our intuition is to use the approach at well visits with families who are well-established in the clinic. Additional research can identify whether the approach is also useful with families who are new to the clinic or at sick visits.

Conclusion

Recommending HPV vaccination at age 9 offers an exciting opportunity to improve guideline-consistent uptake, thereby protecting young people from future HPV cancers. Training primary care teams in our adapted version of the Announcement Approach can support the many providers who have expressed willingness to adopt the practice of recommending HPV vaccination at age 9. Using evidence-based communication practices will help to ensure that the adoption process goes smoothly so as to increase uptake of HPV vaccine, save time, and maximize parents' and providers' satisfaction with HPV vaccine communication.

Disclosure statement

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